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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,537	04/12/2004	Patrick Mullins	0516-01C	3339
21704	7590	11/15/2005		
LAW OFFICES OF ERIC KARICH 2807 ST. MARK DR. MANSFIELD, TX 76063			EXAMINER LUU, THANH X	
			ART UNIT 2878	PAPER NUMBER

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/822,537

Applicant(s)

MULLINS ET AL.

Examiner

Thanh X. Luu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4 and 5, are rejected under 35 U.S.C. 102(b) as being anticipated by Blackerby (U.S. Patent 4,866,580).

Regarding claims 1, 2, 4 and 5, Blackerby discloses (see Figs. 6-9) a photosensor control unit, comprising: a plurality of LEDs (46, 48) adapted to be mounted in a light module, the LEDs being configured to produce light having wavelengths within a first range of wavelengths (visible); a light sensor (72) adapted to be mounted in the lighting module adjacent the LEDs, the light sensor being responsive to light having wavelengths within a second range of wavelengths (IR), wherein the second range of wavelengths is exclusive of the first range of wavelengths; and a switch (78) adapted to operably control the LEDs responsive to the light sensor, wherein the

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LEDs emit light having wavelengths within the first range of wavelengths responsive to the presence or absence of light within the second range of wavelengths. Blackerby also discloses (see Figs. 6-9) the LEDs direct light in a first direction (e.g. a portion of the light is directed away from the IR transmitter light) and the light sensor is positioned to receive light from a second direction substantially opposite from the first direction.

The housing has an inner surface that extends to a perimeter of the device and includes a downwardly extending sidewall as claimed.

4. Claims 1-6 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Budnovitch (U.S. Patent 5,945,925).

Regarding claims 1-6 and 9-14, Budnovitch discloses (see Figs. 2 and 4) a photosensor control unit, comprising: a plurality of LEDs (22a, 24a, 26a) adapted to be mounted in a light module, the LEDs being configured to produce light having wavelengths within a first range of wavelengths (visible); a light sensor (18 or 20) adapted to be mounted in the lighting module adjacent the LEDs, the light sensor being responsive to light having wavelengths within a second range of wavelengths (IR), wherein the second range of wavelengths is exclusive of the first range of wavelengths; and a switch (28) adapted to operably control the LEDs responsive to the light sensor, wherein the LEDs emit light having wavelengths within the first range of wavelengths responsive to the presence or absence of light within the second range of wavelengths. Budnovitch also discloses (see Fig. 2) the LEDs direct light in a first direction (out of the page) and the light sensor (18) is positioned to receive light from a second direction (into the page) substantially opposite from the first direction. The housing (see Figs. 2

and 7) has an inner surface that extends to a perimeter of the device and includes a downwardly extending sidewall as claimed. Budnovitch also discloses (see Fig. 4) the LEDs and the sensor are mounted to a first surface of a circuit board (at 10); and a lens (not labeled) as claimed.

5. Claims 1 and 2, are rejected under 35 U.S.C. 102(e) as being anticipated by Midgley et al. (U.S. Patent 6,642,955).

Regarding claims 1 and 2, Midgley et al. disclose (see Figs. 1, 3 and 4) a photosensor control unit, comprising: a plurality of LEDs (8) adapted to be mounted in a light module, the LEDs being configured to produce light having wavelengths within a first range of wavelengths (IR); a light sensor (10) adapted to be mounted in the lighting module adjacent the LEDs, the light sensor being responsive to light having wavelengths within a second range of wavelengths (visible; see Fig. 3), wherein the second range of wavelengths is exclusive of the first range of wavelengths; and a switch (9) adapted to operably control the LEDs responsive to the light sensor, wherein the LEDs emit light having wavelengths within the first range of wavelengths responsive to the presence or absence of light within the second range of wavelengths. Midgley et al. also disclose (see Fig. 1) the LEDs direct light in a first direction (pointing to the left) and the light sensor is positioned to receive light from a second direction (from the left, pointing to the right) substantially opposite from the first direction.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Midgley et al.

Regarding claims 6, 9 and 10, Midgley et al. disclose the claimed invention as set forth above. Midgley et al. do not specifically disclose a circuit board as claimed.

However, mounting LEDs on circuit boards are notoriously well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a circuit board in the apparatus of Midgley et al. to effectively fix the LEDs in place for proper positioning.

8. Claims 6, 9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackerby.

Regarding claims 6, 9 and 12-14, Blackerby discloses the claimed invention as set forth above. Blackerby does not specifically disclose a circuit board as claimed.

However, mounting LEDs and sensors on circuit boards are notoriously well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a circuit board in the apparatus of Midgley et al. to effectively fix the LEDs and sensors in place for proper positioning.

9. Claims 7, 8, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Blackerby or Budnovitch or Midgley et al. in view of Noone et al. (U.S. Patent 4,791,290).

Regarding claims 7, 8, 15 and 16, Blackerby, Budnovitch and Midgley et al.

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disclose the claimed invention as set forth above. Blackerby, Budnovitch and Midgley et al. do not specifically disclose a heat dissipation configuration as claimed. Noone et al. disclose (see Figs.) a circuit board (2) including a thermally conductive layer (pins 4) for conducting heat from a photosensor unit for cooling as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a heat dissipation configuration in the apparatus of Blackerby, Budnovitch or Midgley et al. to cool the device and improve detection.

10. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Blackerby or Midgley et al. in view of Budnovitch.


Regarding claims 3 and 11, Blackerby and Midgley et al. disclose the claimed invention as set forth above. Blackerby and Midgley et al. do not specifically disclose a heat dissipation configuration as claimed. Budnovitch discloses (see Figs.) lens (not labeled) as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a lens in the apparatus of Blackerby or Midgley et al. for focusing to obtain more coherent detection.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X. Luu  
Primary Examiner  
Art Unit 2878

11/2005